



Case No. ELLIP.004A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Magnussen et al

Serial No.: 09/800,979

Filed: 03/08/2001

For: VIBRATORY MOTORS AND  
METHODS OF MAKING AND USING  
SAME

Group No.: Unknown

Examiner: Unknown

**A M E N D M E N T**

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON D C 20231

Dear Sir/Madam:

In response to the Notice of Incomplete Reply mailed September 28, 2001, please amend page 18 of the specification to read as shown below. A copy marked to show the changes is attached.

opening is optionally, but preferably defined in part by opposing sidewalls that are curved. The walls can be curved toward, or away from the opening and the piezoelectric element therein. Preferably the sidewalls are curved, and have a uniform cross section for a substantial portion of the length of the sidewall. A

substantial length includes over half the length, preferably more, and ideally the entire length until the junction with the end walls is reached. Rectangular cross sections are preferred.

Given the present disclosure, further methods will be apparent to one skilled in the art to implement the above features and advantages, and the features and advantages discussed below. Further, other objects and features of the invention will become apparent from consideration of the following description taken in connection with the accompanying drawings, in which like numbers refer to like parts throughout.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 show a plan side view of a first embodiment of this invention;

Figure 2 shows a top view of the vibratory element of Figure 1;

Figure 3 shows an end view of Figure 2;

Figure 4 shows a perspective view of a second embodiment of this invention;

Figure 5 shows a side view of a third embodiment of this invention using a C-clamp configuration;

Figure 6 shows a perspective view of a fourth embodiment of this invention driving multiple elements;

Figure 7a shows a perspective view of a vibratory element of this invention containing a press-fit piezoelectric element;

Figure 7b shows an enlarged portion of the vibratory element of Figure 7a during assembly;

Figure 8 shows a fifth embodiment of this invention having a press-fit piezoelectric element;

Figures 9 shows a top view of a press-fit embodiment before deformation;

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Figure 10 shows a top view of the embodiment of Figure 9 after deformation by a cylindrical wedge;

Figure 11 shows a sectional view along line 11-11 of Figure 10;

Figure 12 shows a top view of an alternative embodiment of Figure 9 using a rectangular wedge;

**REMARKS**

The Office noted that the Description of Drawings referred to Figures 1a-1d, while only a single "Figure 1" was submitted. The specification has been amended to refer only to Figure 1 so the description conforms to the papers as filed. A copy of page 18 showing the changes is attached.

If any additional fee is required, please charge Deposit Account Number 19-4330.

Respectfully submitted,

Date:

11/27/01

By:

Lowell Anderson

Lowell Anderson

Registration No. 30,990

STETINA BRUNDA GARRED & BRUCKER

75 Enterprise, Suite 250

Aliso Viejo, CA 92656

(949) 855-1246

姓名	性别	年龄	职业	住址	电话	备注
王德胜	男	45	工人	XX路XX号	XXXX	
李小红	女	32	教师	XX街XX号	XXXX	
张小明	男	28	学生	XX村XX组	XXXX	
赵大刚	男	55	干部	XX路XX号	XXXX	
陈秀英	女	40	工人	XX街XX号	XXXX	
周小华	男	35	教师	XX村XX组	XXXX	
吴大伟	男	48	工人	XX路XX号	XXXX	
郑小丽	女	25	学生	XX街XX号	XXXX	
孙大刚	男	50	干部	XX村XX组	XXXX	
马小华	女	38	工人	XX路XX号	XXXX	
朱大伟	男	42	教师	XX街XX号	XXXX	
徐小丽	女	22	学生	XX村XX组	XXXX	
高小华	男	30	工人	XX路XX号	XXXX	
林大伟	男	45	干部	XX街XX号	XXXX	
罗小华	女	35	工人	XX村XX组	XXXX	
周小华	男	28	学生	XX路XX号	XXXX	
吴大伟	男	50	干部	XX街XX号	XXXX	
郑小丽	女	25	学生	XX村XX组	XXXX	
孙大刚	男	55	干部	XX路XX号	XXXX	
马小华	女	38	工人	XX街XX号	XXXX	
朱大伟	男	42	教师	XX村XX组	XXXX	
徐小丽	女	22	学生	XX路XX号	XXXX	
高小华	男	30	工人	XX街XX号	XXXX	
林大伟	男	45	干部	XX村XX组	XXXX	
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周小华	男	28	学生	XX村XX组	XXXX	
吴大伟	男	50	干部	XX路XX号	XXXX	
郑						

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opening is optionally, but preferably defined in part by opposing sidewalls that are curved. The walls can be curved toward, or away from the opening and the piezoelectric element therein. Preferably the sidewalls are curved, and have a uniform cross section for a substantial portion of the length of the sidewall. A substantial length includes over half the length, preferably more, and ideally the entire length until the junction with the end walls is reached. Rectangular cross sections are preferred.

Given the present disclosure, further methods will be apparent to one skilled in the art to implement the above features and advantages, and the features and advantages discussed below. Further, other objects and features of the invention will become apparent from consideration of the following description taken in connection with the accompanying drawings, in which like numbers refer to like parts throughout.

### BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1[a-1d] shows a plan side view[, side perspective view, end view, and bottom view, respectively,] of a first embodiment of this invention;

Figure 2 shows a top view of the vibratory element of Figure 1;

Figure 3 shows an end view of Figure 2;

Figure 4 shows a perspective view of a second embodiment of this invention;

Figure 5 shows a side view of a third embodiment of this invention using a C-clamp configuration;

Figure 6 shows a perspective view of a fourth embodiment of this invention driving multiple elements;

Figure 7a shows a perspective view of a vibratory element of this invention containing a press-fit piezoelectric element;

Figure 7b shows an enlarged portion of the vibratory element of Figure 7a during assembly;

Figure 8 shows a fifth embodiment of this invention having a press-fit piezoelectric element;

Figure 9 shows a top view of a press-fit embodiment before deformation;

Figure 10 shows a top view of the embodiment of Figure 9 after deformation by a cylindrical wedge;

Figure 11 shows a sectional view along line 11-11 of Figure 10;

Figure 12 shows a top view of an alternative embodiment of Figure 9 using a rectangular wedge;

## NOV 28 2001

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/800,979	03/08/2001	Bjoern Magnussen	ELLIP-004A

Lowell Anderson  
Stetina Brunda Garred & Brucker  
Suite 250  
75 Enterprise  
Aliso Viejo, CA 93656



\*OC000000006807667\*

Date Mailed: 09/28/2001

**NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)**

**Filing Date Granted**

The U.S. Patent and Trademark Office has received your reply on 07/20/2001 to the Notice to File Missing Parts (Notice) mailed 05/23/2001 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain **EXTENSIONS OF TIME** under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

The following item(s) appear to have been **omitted** from the application:

- Figure(s) **1a-1d** described in the specification.

I. Should applicant contend that the above-noted omitted item(s) was in fact deposited in the U.S. Patent and Trademark Office (USPTO) with the nonprovisional application papers, a copy of this Notice and a petition (and \$130.00 petition fee (*37 CFR 1.17(h)*)) with evidence of such deposit **must** be filed within **TWO MONTHS** of the date of this Notice. The petition fee will be refunded if it is determined that the item(s) was received by the USPTO.

II. Should applicant desire to supply the omitted item(s) and accept the date that such omitted item(s) was filed in the USPTO as the filing date of the above-identified application, a copy of this Notice, the omitted item(s) (with a supplemental oath or declaration in compliance with 37 CFR 1.63 and 1.64 referring to such items), and a petition under 37 CFR 1.182 (with the \$130.00 petition fee (37 CFR 1.17(h)) requesting the later filing date **must** be filed within **TWO MONTHS** of the date of this Notice.

III. The failure to file a petition (and petition fee) under the above options (I) or (II) within **TWO MONTHS** of the date of this Notice (37 CFR 1.181(f)) will be treated as a constructive acceptance by the applicant of the application as deposited in the USPTO. **THIS TWO MONTH PERIOD IS NOT EXTENDABLE UNDER 37 CFR 1.136(a) or (b).** In the absence of a timely filed petition in reply to this Notice, the application will maintain a filing date as of the date of deposit of the application papers in the USPTO, and original application papers (*i.e.*, the original disclosure of the invention) will include only those application papers present in the USPTO on the date of deposit.

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

[illegible]